

Amendment to the Claims:-

This listing of claims will replace all prior versions, and listings, of claims in the application:-

Listing of Claims:-

Claims 1-23 (Withdrawn)

Claim 24 (Currently amended) A method of treatment of human malignancies, comprising administering ~~modified~~ isolated and purified recombinant human arginase I to a patient, wherein said arginase comprising said chemical modification resulting in a specific activity of at least 336 I.U./mg, a purity of 80-100% and an extended half-life of ~~said human arginase I~~ for at least 3 days.

Claim 25 (Canceled)

Claim 26 (Previously presented) The method of treatment according to claim 24, wherein said human malignancies are selected from the group consisting of: liver tumor, breast cancer, and rectal cancer.

Claim 27 (Currently amended) The method of treatment according to Claim 24 wherein said modified arginase has an extended half-life of at least 6 days ~~in a human having a malignancy~~.

Claim 28 (Previously presented) A method of treatment malignancies of a human patient comprising administering a pharmaceutical composition that reduces the physiological arginine level in said patient to below 10 μ M for at least 3 days.

Claim 29 (Currently amended) The method of Claim 28, wherein said method is performed in the absence of protein ~~degradation~~ breakdown inhibitor.

Claim 30 (Canceled)

Claim 31 (Canceled)

Claim 32 (Currently amended) The method of treatment according to Claim 29 28 wherein said composition comprises: ~~modified~~ comprising isolated and purified recombinant human arginase I, ~~said modification resulting in an extended half-life of said human arginase I of at least 6 days,~~ said arginase having a specific activity of at least 336 I.U./mg, a purity of 80-100% and an extended half-life of at least 3 days.

Claim 33 (Canceled)

Claim 34 (Canceled)

Claim 35 (Previously presented) The method of treatment according to Claim 24, wherein said human arginase I is modified by pegylation.

Claim 36 (Currently amended) The method of treatment according to Claim 24, wherein said method is performed in the absence of protein ~~degradation~~ breakdown inhibitor.

Claim 37 (Previously presented) The method of treatment according to claim 28, wherein said human malignancies are selected from the group consisting of: liver tumor, breast cancer, and rectal cancer.